

Monthly Update on 2018- 2019 WRAP Workplan

August 1, 2018

RTOWG Work Group

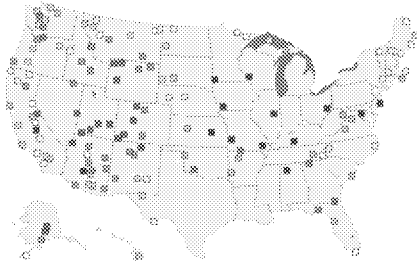
- **Co-Chairs:**
 - Gail Tonnesen (EPA R8)
 - Kevin Briggs (CO CDPHE)
 - Mike Barna (NPS ARD)
- **Call Schedule:**
 - Next call: 8/16/18
 - ~bi-monthly calls so far, with monthly calls once modeling RFP released
 - RTOWG co-chairs participating in other workgroup calls
 - Also want to establish monthly call with EPA OAQPS
- **Website:**
 - <http://www.wrapair2.org/RTOWG.aspx>

Status Report for RTOWG

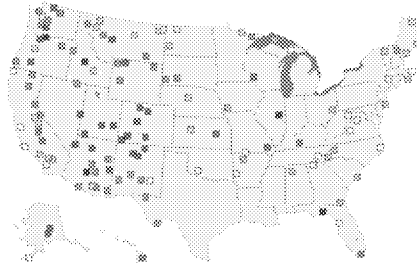
- Completion of “model year representativeness” study
 - Approach
 - Evaluate recent candidate years (especially 2014 – 2016) with regard to meteorology, air quality, and emissions
 - Identify any potential concerns that would disqualify a candidate year from development
 - Status
 - Analyses finished
 - RTOWG members have reviewed and commented on draft results
 - Milestones
 - Final report to be discussed 8/16/18
 - Coordination and Next Steps
 - Review of draft final report from Ramboll
 - Distribution to RTOWG, RHPWG

Example: W20 extinction, 2014 v. 2016

Extinction (1/Min) at IMPROVE Sites for CY2014
Annual Average, Spatial Max: 127.59, Spatial Min: 13.16
W20 Based on Total Aerosol Extinction



Extinction (1/Min) at IMPROVE Sites for CY2016
Annual Average, Spatial Max: 119.65, Spatial Min: 9.91
W20 Based on Total Aerosol Extinction



Status Report for RTOWG

- **Coordination with EPA OAQPS to discuss updates to western air quality modeling tools**
 - **Approach**
 - Discuss modeling approach between EPA OAQPS and WRAP RTOWG to ensure that EPA modeling has maximum utility for western air quality planners
 - Identify potential improvements to CAMx for regional haze simulations
 - **Status**
 - Several key science topics have been identified within the modeling platform, e.g., boundary conditions, treatment of ammonia, estimates of natural conditions
 - **Milestones**
 - Establish a monthly call with EPA OAQPS and WRAP RTOWG, starting August 2018
 - **Coordination and Next Steps**
 - Prioritize updates to CAMx
 - Evaluate feasibility of updates

Status Report for RTOWG

- Evaluation of “background” ozone and its role in the western US
 - Approach:
 - Use a global/region model sensitivity simulations with zero U.S anthropogenic emissions.
 - Run MATS (or SMAT) with CAMx 12 km 2014 base case as the base year and zero U.S. anthro as future year to estimate U.S. background ozone in 2014.
 - Use of MATS provides adjustment for model bias and error.
 - Note: RAQC/CDPHE used a similar MATS approach with zero international emissions to estimate the international anthropogenic contribution to ozone in Denver/Front Range NAA.
 - The model simulations used to evaluate background can also be used to estimate background haze level from natural and international anthropogenic sources.
 - Coordination and Next Steps:
 - Consult with EPA/OAQPS on options for global model simulations for 2014.
 - Develop modeling protocol.